A7

-- One may also have one or a multiplicity of vertical capillary channels comprising a terminal region having a larger cross-sectional area than the capillary channel which may comprise a non-wettable region at or above the interface between the terminal region and the channel. The capillary would be placed in a reservoir to replenish liquid lost from the zone formed in the terminal region. As one added new liquid to the terminal region, initially the meniscus would be raised. Both evaporation and movement of the meniscus downward would occur, so that displacement of solution containing an active component would be minimized, keeping the volume of the zone minimal. The terminal region could be cylindrical, conical, or the like. Generally, the capillary channel would be circular, so that the terminal region would have at least about 1.2 times the diameter of the capillary channel, frequently at least about 1.5 times the diameter of the capillary channel and up to about 20 times.--

On page 30, replace the paragraph starting on line 14 with the following paragraph:

A8

-- In many situations one may wish to separate constituents of an assay mixture. Where the substrate and product of an enzyme assay or chemical assay both provide the same signal, e.g. fluorescence, but have different mobilities, the substrate and product may be readily determined by using electrophoresis. Where multiplexed reactions are performed in the zone, one will have an interest in detecting the plurality of events that may have occurred. For example, one may have a plurality of reagents carrying electrophoretic tags (labels which have different mobilities in electrophoresis), where the result of the process in the zone is to release an electrophoretic tag in the presence of a target moiety. Where there may be a plurality of target moieties in the sample, the ability to detect the presence of the target moieties by the separation of released electrophoretic tags greatly enhances the simplicity with which the process may be carried out. Since the entire process may be automated, the addition of the assay components, the processing of the assay, the movement of the assay components into the electrokinesis system and the separation, confusion between samples is substantially eliminated, direct comparisons are achieved between samples and controls, component handling is minimized and more accurate results can be obtained.--